PARADYNE®

Hotwire® 5030 POTS Splitter Customer Premises Installation Instructions

Document Number 5030-A2-GN10-20

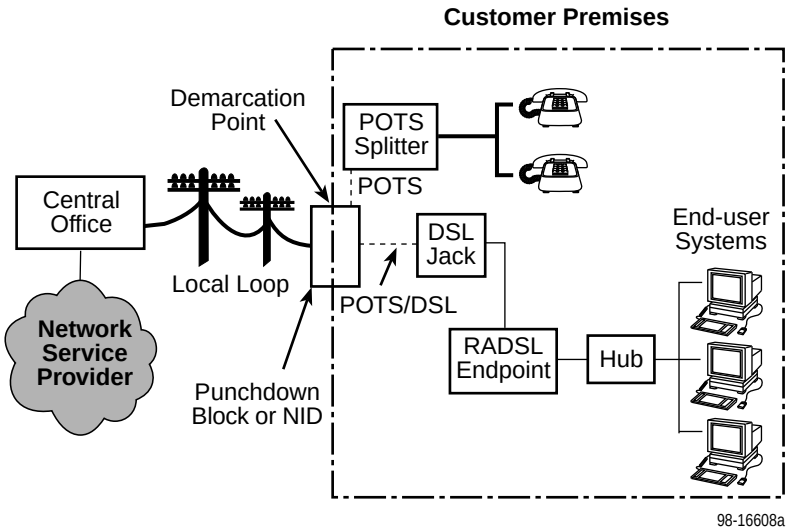
December 1999

What Does the Hotwire 5030 POTS Splitter Do?

The Hotwire® 5030 POTS Splitter and Hotwire endpoints are components in the Hotwire RADSL Access System. This system provides high-speed Internet or corporate LAN access over traditional twisted-pair copper telephone wiring.

The POTS (plain old telephone service) splitter blocks out the DSL (Digital Subscriber Line) signal and allows the POTS frequencies to pass through. At the customer premises, the RADSL (Rate Adaptive Digital Subscriber Line) endpoint and telephone can function simultaneously over the same pair of copper wires when a POTS splitter is used at both ends of the local loop.

Copper pairs run from the central office to the customer premises to create the local loop. The local loop terminates on the customer premises at the demarcation point in a punchdown block or NID (network interface device). Wiring is connected from the demarcation point to the customer premises POTS splitter and to the DSL jack.



DSL – Digital Subscriber Line
NID – Network Interface Device
POTS – Plain Old Telephone Service
RTU – Remote Termination Unit

-------- New Wiring Connections
——— Existing Wiring (POTS)

Preparation

Verify that:

- ❏ The local loop POTS is connected to the POTS/DSL network at the punchdown block or NID.
- ❏ New or existing unshielded twisted-pair wiring (CAT3 or better) is used with this product. The CAT3 wiring must meet EIA/TIA-568 specifications with 24 AWG (.5 mm) or 26 AWG (.4 mm).

Package Checklist

Verify that your package contains the following:

- ❏ POTS splitter and housing with closure screw.
- ❏ Small plastic bag with two 8–15 x 1″ Type A combination Phillips/slotted-head screws and two 1″ plastic anchors.

Tools Required

- ❏ Flat-blade screwdriver to tighten terminal screws
- ❏ 3/8″ nut driver to close housing securely
- ❏ Phillips-head or combination Phillips/slotted-head screwdriver to mount the housing
- ❏ Drill and 3/16″ drill bit to mount the housing in cement or cinder block

Related Documents

For Hotwire RADSL endpoint installation instructions, refer to the appropriate document:

Document Number	Document Title
5216-A2-GN10	*Hotwire 5216 RTU Customer Premises Installation Instructions*
5246-A2-GN10	*Hotwire 5246 RTU Customer Premises Installation Instructions*
5446-A2-GN10	*Hotwire 5446 RTU Customer Premises Installation Instructions*
5620-A2-GN10	*Hotwire 5620 RTU Customer Premises Installation Instructions*
6371-A2-GN10	*Hotwire 6371 Rate Adaptive DSL Router Installation Instructions*

Contact your sales or service representative to order additional product documentation.

Paradyne documents are also available on the World Wide Web at **www.paradyne.com**. Select *Library → Technical Manuals.*

Mounting the POTS Splitter Housing

The POTS splitter can be placed:

- On the outside of the building near the punchdown block or NID, or
- Inside the building.

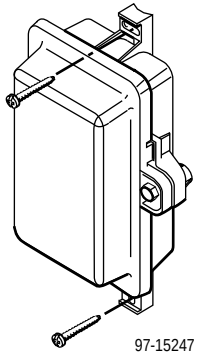
When mounted outside, the POTS splitter must be installed at or above the height of the NID, and should be a minimum of three feet above ground.

At the front of the housing, align the housing to open from the right with the rubber grommet for cable access facing downward. Place the housing upright as shown. Use a Phillips-head or combination Phillips/slotted-head screwdriver and the screws included in the package.

If mounting to:

- **Cement or cinder block:** Use a drill and 3/16″ masonry drill bit to install the two plastic anchors first. Then, install the two 8–15 x 1″ Type A screws.
- **Wood**: Install only the two 8–15 x 1″ Type A screws and discard the plastic anchors.

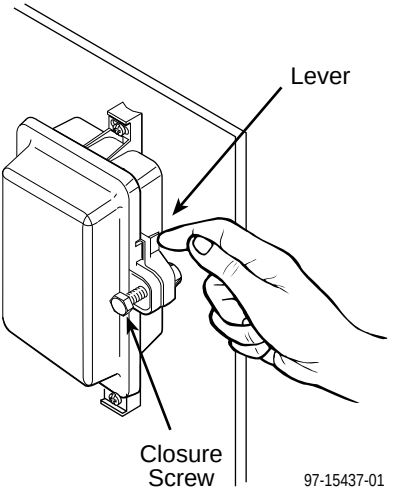
POTS Splitter Housing

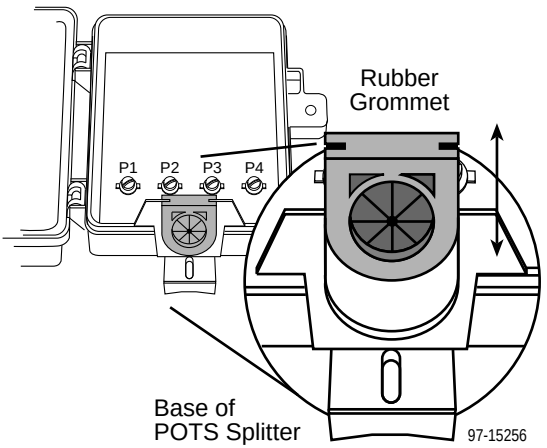


Preparing the POTS Splitter

▶ Procedure

1. Unscrew the closure screw and open the housing by pressing on the lever on the right above the closure screw.
2. Remove the rubber grommet at the base of the POTS splitter.
3. Make a small diagonal cut in the rubber grommet to feed the wiring through.
4. Replace the rubber grommet at the base of the POTS splitter.





Installing the POTS Splitter Wiring

The local loop terminates at the punchdown block or NID. Wiring must be connected from the customer premises side of the punchdown block or NID to an RJ11 jack. Typically, the punchdown block is installed in commercial locations and the NID is installed in residential locations.

▶ Procedure

1. Access the punchdown block or NID.

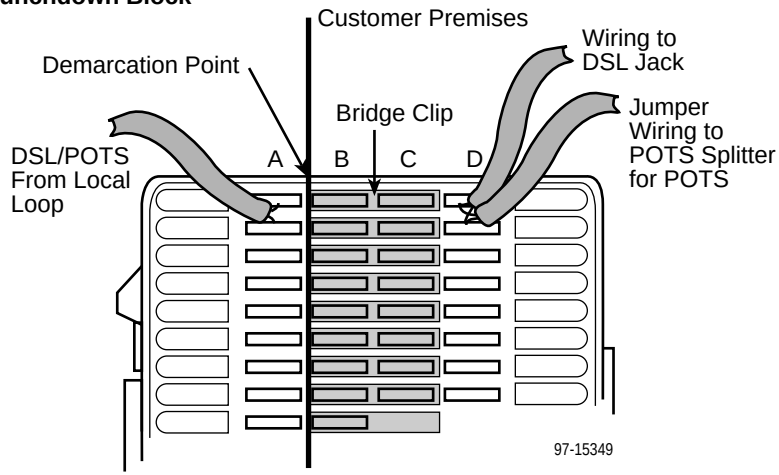
   ⚠ WARNING:

   Do not continue unless the DSL access line from the local loop has been disconnected at the punchdown block or NID. Refer to *Important Safety Instructions* on page 11.

2. Disconnect the POTS access wiring from the local loop.

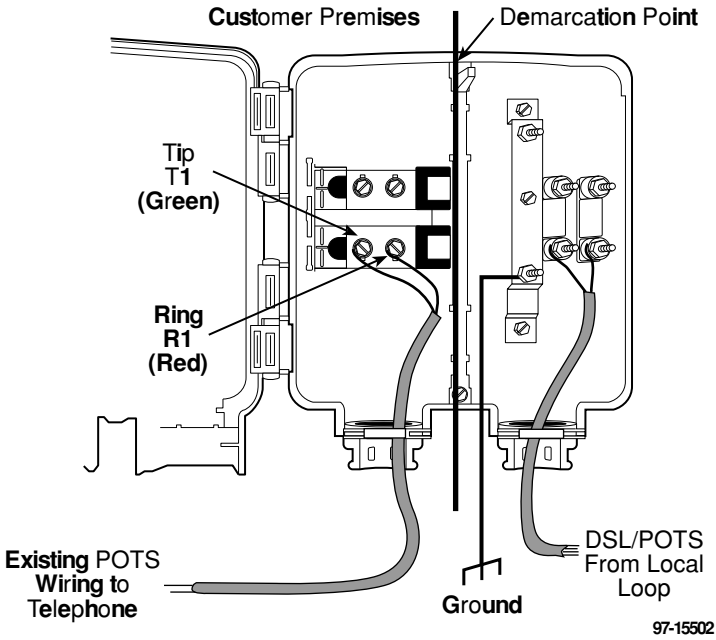
   A punchdown block is used in the following example.

Punchdown Block



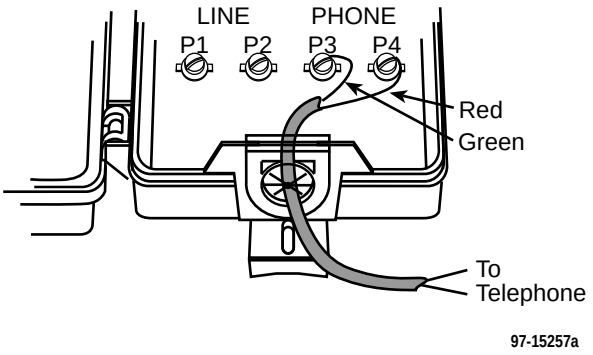
Green and Red are the standard pair wiring colors used in the next example for Tip T1 and Ring R1. Your wiring may differ.

Telephone Network Interface Device (NID)



3. Disconnect the existing POTS wiring to the telephone from the T1/R1 connectors on the customer premises side.
4. Feed the disconnected POTS wiring through the POTS splitter rubber grommet access opening created at the base of the POTS splitter. Connect the wiring to the right side labeled PHONE. Attach green to P3 and red to P4. Tighten both terminal screws with a flat-blade screwdriver.

POTS Splitter

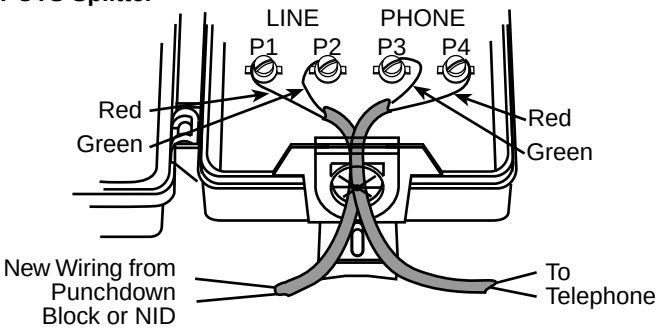


Reconnecting to the Local Loop

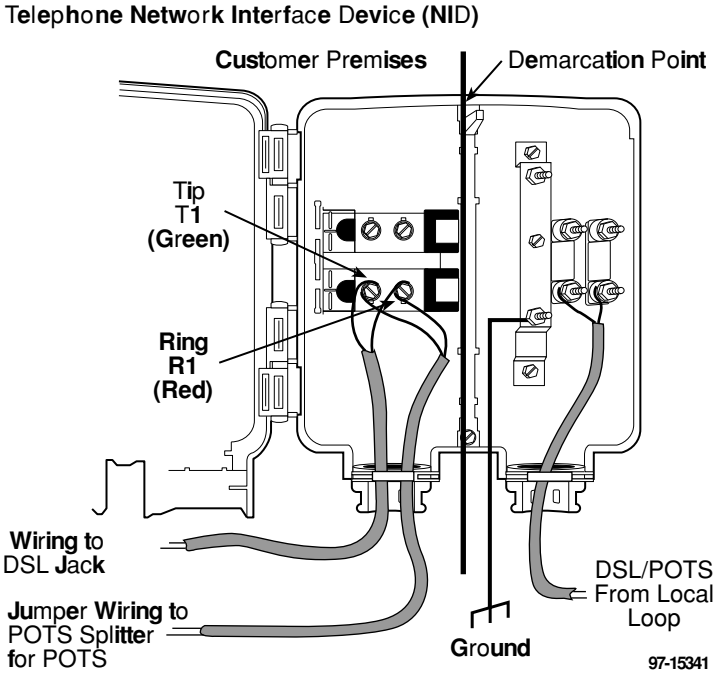
▶ Procedure

1. Feed new jumper wiring through the POTS splitter rubber grommet. Remove the insulation at the end of the wiring.
2. On the left side labeled LINE, attach red to terminal screw P1 and green to terminal screw P2. Tighten both terminal screws with a flat-blade screwdriver.

POTS Splitter

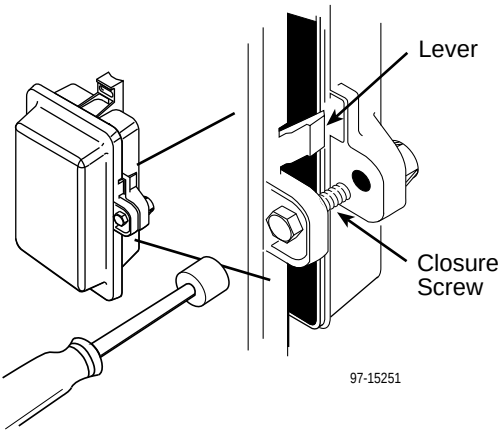


3. Locate the T1/R1 connectors on the customer premises side of the punchdown block or NID where the existing POTS wiring was removed in Step 3 on page 6. Locate the jumper pair from POTS splitter P1/P2 labeled LINE. Attach the POTS splitter wiring to the T1/R1 connectors at the NID.



4. Close the POTS splitter by snapping the lever shut.

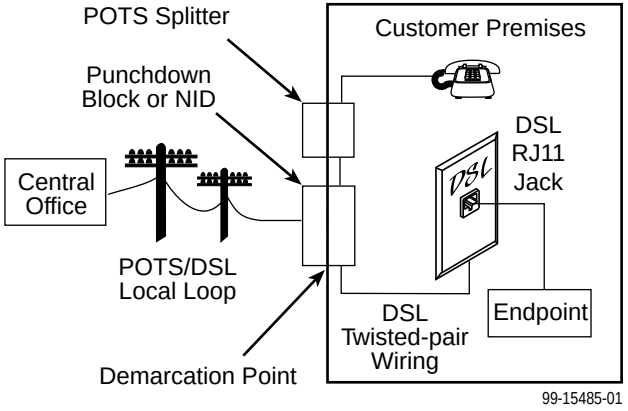
5. Use the 3/8″ nut driver on the closure screw to securely close the housing.



DSL Access Wiring

▶ Procedure

1. Attach new wiring to the T1/R1 connectors that will go to the DSL jack from the punchdown block or NID.
2. Tighten the T1/R1 terminal screws with a flat-blade screwdriver.



You are now ready to run the specified wiring to the endpoint location and install a DSL wall jack. For endpoint installation instructions, refer to *Related Documents* on page 2.

If the endpoint is not being installed at this time, reconnect the local loop wiring at the demarcation point.

Hotwire 5030 POTS Splitter Technical Specifications

Item	Specification*
Height x Width x Depth	6.65″ x 5.44″ x 2.25″ (16.89 cm x 13.82 cm x 5.72 cm)
Weight	10.2 ounces (289.2 grams)
Approvals	
FCC Part 68	Refer to the equipment's label for Registration Number.
Safety Certifications	Refer to the equipment's label for approvals on product.
Physical Environment	
Operating temperature	–40° F to 140° F (–40° C to 60° C)
Storage temperature	–40° F to 158° F (–40° C to 70° C)
Relative humidity	5% to 95% (noncondensing)
Shock and vibration	Withstands normal shipping and handling
Interface Connectors	Four terminal screws
* Technical Specifications subject to change without notification.	

⚠ Important Safety Instructions

1. Read and follow all warning notices and instructions marked on the product or included in the manual.
2. This product is intended to be connected to Listed/Certified telephone wiring with a minimum of 24 AWG (.5 mm) behind a Listed/Certified primary protector.
3. Do not attempt to install or service this product yourself, as opening or removing covers may expose you to dangerous high-voltage points or other risks. Refer all installation and servicing to qualified service personnel.
4. When installed in the final configuration, the product must comply with the applicable Safety Standards and regulatory requirements of the country in which it is installed. If necessary, consult with the appropriate regulatory agencies and inspection authorities to ensure compliance.
5. In addition, since the equipment is to be used with telecommunications circuits, take the following precautions:
   - — Never install telephone wiring during a lightning storm.
   - — Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
   - — Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
   - — Use caution when installing or modifying telephone lines.
   - — Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
   - — Do not use the telephone to report a gas leak in the vicinity of the leak.

Notice to Users of the Telephone Network

This equipment complies with Part 68 of the FCC rules. On the inside of the equipment's enclosure is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment is intended to be hard wired to the telephone line's primary protector and to the inside building wiring. If the primary protector utilizes an RJ11C jack for the inside building wiring connection, connection to the protector must be made using a Part 68-compliant telephone line cord, spade terminal to RJ11C plug.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

If the Model 5030 Telephone Line Filter causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with the Telephone Line Filter, for repair or warranty information, please refer to *Warranty, Sales, Service, and Training Information*.

No repairs may be performed by the end user.

The equipment can not be used on public coin phone service provided by the telephone company. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

Warranty, Sales, Service, and Training Information

Contact your local sales representative, service representative, or distributor directly for any help needed. For additional information concerning warranty, sales, service, repair, installation, documentation, training, distributor locations, or Paradyne worldwide office locations, use one of the following methods:

- **Internet:** Visit the Paradyne World Wide Web site at **www.paradyne.com**. (Be sure to register your warranty at **www.paradyne.com/warranty**.)
- **Telephone:** Call our automated system to receive current information by fax or to speak with a company representative.
  - Within the U.S.A., call 1-800-870-2221
  - Outside the U.S.A., call 1-727-530-2340

Document Feedback

We welcome your comments and suggestions about this document. Please mail them to Technical Publications, Paradyne Corporation, 8545 126th Ave. N., Largo, FL 33773, or send e-mail to **userdoc@paradyne.com**. Include the number and title of this document in your correspondence. Please include your name and phone number if you are willing to provide additional clarification.

5030–A2–GN10–20

Copyright © 1999 Paradyne Corporation